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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,534	09/15/2005	Eberhard Gobel	23367	9685
535 7590 08/20/2007 K.F. ROSS P.C. 5683 RIVERDALE AVENUE SUITE 203 BOX 900 BRONX, NY 10471-0900			EXAMINER YIP, WINNIE S	
			ART UNIT 3636	PAPER NUMBER
			MAIL DATE 08/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,534	Applicant(s) GOBEL, EBERHARD	
	Examiner Winnie Yip	Art Unit 3636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-17, 19-21, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-17, 19-21, 24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to applicant's amendment filed on May 25, 2007.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(h)(4) because the drawings (i.e., fig. 1), a moved position such as "a slide shiftable along one of the ribs ..." (claim 15), should be shown such as by an arrow in order to show the relationship or the operation of the assembly. Correction is required.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the term "brace struts" (not just "brace") as amended in the claims must be clearly defined in the specification.

Claim Rejections - 35 USC § 112

3. Claims 15-17, 19-21, and 24-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 15:

- a. The term “the plastic ribs” (line 21) lacks a sufficient antecedent basis because what are the ribs made is not previously claimed.
- b. The limitation “the frame” (line 24) lacks a sufficient antecedent basis since the element has not been previously defined.
- c. And, the terms “a sectoral inversion” (line 14) and “an automatic restoration” (lines 14-15) are not clear as referring to what element. Should it read: a sectoral inversion of the canopy and the ribs ”?
- d. Further, the language “the canopy and the ribs forming in the open position a spring element” (lines 11-12) is confusing. It appears to read “the canopy and the ribs in the open position forming a spring element”.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. Claims 15- 17, 19-21, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 1,167,431 to Raabe in view of US Patent No. 4,061,154 to Cox et al.

Raabe shows and teaches an umbrella comprising: a central axis-defining shaft (A), an actuator (no number) movable axially along the shaft, a frame including a plurality of ribs (C)

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having inner ends being pivotally secured to the shaft and outer ends being movable between closed and opened positions, a plurality of spreaders (D) each having an outer end being pivotally mounted on one of the ribs by a connector (H) and an inner end being pivotally mounted on the actuator respectively, a plurality of slides (5) each shiftable along one of the ribs adjacent the outer end of the rib, a plurality of brace struts (F) being distributed angularly and having ends being pivotally connected between the respective spreader (D) and the slide (5), each rib (8) further include an abutment (S') mounted on the respective rib for limiting sliding of the respective slide toward the respective rib inner end such that the outer end of the brace causes the rib being curved so as to prestress the frame when open in a direction resisting inversion of the canopy, and a flexible canopy (not shown) spanned over the ribs, wherein the brace strut (F) provides a means for preventing the umbrella from turning inside out.

Although Raabe does not define the ribs, the spreaders and the brace struts being made of plastic and with specific diameter as claimed, Cox et al. teach an umbrella having a frame including ribs (40) and spreaders (70) being made of fiber glass reinforced plastic (see col. 3, lines 1-12) such that the umbrella has a lightweight frame with the ribs and spreaders being resiliently bend in response to be deformed rather than irreversibly deforming or breaching (see col. 5, lines 35-45). Therefore, it would have been obvious design choice for one of ordinary skill in the art at the time the invention was made to modify the umbrella of Raabe having the ribs, the spreaders and the brace struts being made of fiber glass reinforced plastic as taught by Cox et al. to provide an umbrella with a lightweight and inexpensively molded frame to take the advantages of the sufficient impact and spring strength characterizes and wear properties of the plastic such that the frame provides a damping resistance to resist the inversion of the canopy in

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a wind storm and to restore automatically when the wind pressure drops. All of the foregoing is within the skills, competence and knowledge of the person with ordinary skills in the covering art.

Regarding claim 16, Raabe shows the length (GH) of each rib (C) between its outer end (G) and its pivotal connection (H) with the outer end of the respective spreader is substantially greater than a length (bK) of the respective brace (F) plus a length (HK) of the respective spreader (D) between its pivotal connection with the respective rib and the with the respective brace as claimed.

Regarding claim 17, Raabe shows the umbrella having the brace struts (F) distributed angularly and extending between the respective spreaders (D) and the respective ribs.

Regarding claims 19-20, although Raabe and Cox et al. do not explicitly define the rib, the spreader, and brace having specific diameters as claimed, since the applicant has not disclosed that the specific diameter of the frame of the umbrella solves any stated problem or is for any particular purpose, it would have been held to be within the general skill of a worker in the art to select the umbrella having frame elements such ribs, spreaders and braces being formed with suitable diameters to accommodate the size of the umbrella in various applications on the basis of its suitability in use as a matter of obvious design choice. And, it appears that the claimed umbrella would perform equally well being made of a plastic with specific diameter such as 2-6 mm as claimed and such modification would not otherwise affect function of the device which relies on its structure and not its particular material and diameter for its function.

Regarding claim 25, Raabe further teaches the slide (5) including a U-shaped section (c-a-d) and a cover (x) being enclosed to form a tube to engage around and shiftable along the

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respective ribs (32), a shoe (b) forming a pivot for connecting the outer end of the respective space struts (F) as claimed.

5. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 1,167,431 to Raabe in view of US Patent No. 4,061,154 to Cox et al. as applied to claim 15 above, and further in view of US Patent No. 6,715,504 to Chen.

Although Raabe and Cox et al. do not specifically define the umbrella having every other spreader having the brace strut as claimed, Chen teaches an umbrella having every other ribs (A) and respective spreaders (3) being formed with a respective brace pivotally connected therebetween to provide different spring strengths to the frame of the umbrella. It would have been obvious to one ordinary skill in art at the time the invention was made to modify the umbrella of Raabe combined with Cox et al. having the frame formed with every other ribs and the respective spreaders provided with a respective brace struts therebetween as taught by Chen to reduce the material of the frame but with sufficient wind resistance as desired.

Response to Arguments

6. Applicant's arguments with respect to claims 15-25 under U.S.C. 102/103, and specifically to features of "brace struts" which are made of plastic rather than flexible chords of the references to achieve elasticity properties and functions has been considered. This feature was not specifically and previously claimed. Therefore, this argument is deemed to be moot in view of the new grounds of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry Contacts

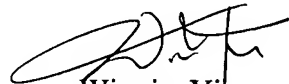
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Winnie Yip whose telephone number is 571-272-6870. The examiner can normally be reached on M-F (9:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Winnie Yip
Primary Examiner
Art Unit 3636

wsy
August 16, 2007